

IN THE CLAIMS

1. (currently amended) A method ~~Method~~ for manufacturing a product having various diameters from a workpiece (1), such as a metal cylinder or plate, in which the workpiece (1) is clamped down in a clamping device (10, 34), the workpiece (1) and a first tool (3A) are rotated about an axis of rotation (2) relative to each other, the workpiece (1) is deformed by means of said first tool (3A) by placing the first tool (3A) into contact with the workpiece (1) and moving the workpiece (1) and/or the first tool (3A) in a direction along said axis of rotation (2), ~~characterized in that~~ wherein at least a second tool (3B) is placed into contact with the workpiece (1) at a position behind the first tool (3A), and ~~in that~~ the workpiece (1) is also deformed by means of said second tool (3B) and wherein two or more forming rollers associated with different tools are mounted on a common holder and said holder is rotated about an axis which crosses said axis of rotation and/or radially adjusted.

2. (Currently Amended) A method manufacturing a product having various diameters from a metal cylinder (1), in which the cylinder (1) is clamped down in a clamping device (10, 34), the cylinder (1) and a first tool (3A) are rotated about an axis of rotation (2) relative to each other, the cylinder (1) is deformed by means of said first tool (3A) by placing the first tool (3A) into contact with the workpiece (1) and moving the cylinder (1) and/or the first tool (3A) in a direction along said axis of rotation (2), ~~characterised in that~~ wherein at least a second tool (3B) is placed into contact with the cylinder (1) at a position behind the first tool (3A), the cylinder (1) is also deformed by means of said second tool (3B) and at least one of the first and second tools is positioned eccentrically with respect to the said axis of rotation (2).

3. (currently amended) A ~~The~~ method according to claim 2, wherein an insert ~~(11B)~~ is placed inside the cylinder and the end of the cylinder ~~(1)~~ is pressed onto the end of the insert member ~~(11B)~~.

4. (Currently Amended) A method of manufacturing a product having various diameters from a workpiece ~~(1)~~, such as a metal cylinder or plate, in which the workpiece ~~(1)~~ is clamped down in a clamping device ~~(10, 34)~~, the workpiece ~~(1)~~ and a first tool ~~(3A)~~ are rotated about an axis of rotation ~~(2)~~ relative to each other, the workpiece ~~(1)~~ is deformed by means of said first tool ~~(3A)~~ by placing the first tool ~~(3A)~~ into contact with the workpiece ~~(1)~~ and moving the workpiece ~~(1)~~ and/or the first tool ~~(3A)~~ in a direction along said axis of rotation ~~(2)~~, ~~characterised in that~~ wherein at least a second tool ~~(3B)~~ is placed to contact with the workpiece ~~(1)~~ at a position behind the first tool ~~(3A)~~, the workpiece ~~(1)~~ is also deformed by means of said second tool ~~(3B)~~ and wherein the first and second tools ~~(3)~~ are moved relative to each other during said working.

5. (Currently Amended) A method of manufacturing a product having various diameters from a workpiece ~~(1)~~, such as a metal cylinder or plate, in which the workpiece ~~(1)~~ is clamped down in a clamping device ~~(10, 34)~~, the workpiece ~~(1)~~ and a first tool ~~(3A)~~ are rotated about an axis of rotation ~~(2)~~ relative to each other, the workpiece ~~(1)~~ is deformed by means of said first tool ~~(3A)~~ by placing the first tool ~~(3A)~~ into contact with the workpiece ~~(1)~~ and moving the workpiece ~~(1)~~ and/or the first tool ~~(3A)~~ in a direction along said axis of rotation ~~(2)~~, ~~characterised in that~~ wherein at least a second tool ~~(3B)~~ is placed into contact with the cylinder ~~(1)~~ at a position behind the first tool ~~(3A)~~, the cylinder ~~(1)~~ is also deformed by means of said second tool ~~(3B)~~.

6. (currently amended) ~~Method~~ The method according to ~~any one of~~

~~the previous claims~~ claim 1, wherein at least a third tool (3B) is placed into contact with the workpiece (1) at a position behind the second tool (3B).

7. (currently amended) ~~Method~~ The method according to ~~any one of the previous claims~~ claim 1 or 2, wherein the tools (3) each comprise two or more forming rollers, between which the workpiece (1) is retained while being worked.

8. (currently amended) ~~Method~~ The method according to ~~any one of the preceding claims~~ claim 1, wherein the workpiece (1) is formed into a finished or semifinished product in only one working cycle.

9. (currently amended) ~~Method~~ The method according to ~~any one of the preceding claims~~ claim 1, wherein a tensile force is exerted on the workpiece (1).

10. (currently amended) ~~Method~~ The method according to claim 9, wherein said tensile force is varied during said working.

11. (currently amended) ~~Method~~ The method according to ~~any one of the preceding claims~~ claim 1, wherein at least one of the tools is adjusted in a radial direction during said working.

12. (currently amended) ~~Method~~ The method according to ~~any one of the preceding claims~~ claim 1, wherein the workpiece (1) has an open end, which end is closed by means of the tools (3), preferably in one operation.

13. (currently amended) ~~Method~~ The method according to ~~any one of the preceding claims~~ except claim 51, wherein the workpiece (1) is a plate-shaped body, and wherein the central axis of the tools is pivoted relative to the axis of rotation (2).

14. (currently amended) ~~Method~~ The method according to claim 13, wherein the tools ~~(3)~~ are moved relative to each other during said working.

15. (currently amended) ~~Method~~ The method according to claim 13 ~~or 14~~, wherein the edge of the workpiece ~~(1)~~ is supported at least during part of the operation.

16. (currently amended) ~~Forming~~ A forming machine suitable for manufacturing products having various diameters, which forming machine comprises at least a clamping device ~~(10, 34)~~ for clamping down a workpiece ~~(1)~~, such as a metal cylinder or plate, a first tool ~~(3A)~~, which can be placed into contact with the workpiece ~~(1)~~ while being worked, means for rotating the workpiece ~~(1)~~ and the first tool ~~(3A)~~ about an axis of rotation ~~(2)~~ relative to each other, and means for moving the workpiece ~~(1)~~ and/or the first tool ~~(3A)~~ in a direction along said axis of rotation ~~(2)~~, ~~characterized in that the forming machine furthermore comprises~~ and at least a second tool ~~(3B)~~ disposed behind said first tool ~~(3A)~~, which can be placed into contact with the workpiece ~~(1)~~ and wherein two or more forming rollers associated with different tools are mounted on a common holder and said holder is mounted in or on the forming machine in such manner as to be capable of rotation about an axis which crosses said axis of rotation and/or of radial translation.

17. (currently amended) A forming ~~Forming~~ machine suitable for manufacturing products having various diameters, which forming machine comprises at least a clamping device ~~(10, 34)~~ for clamping down a workpiece ~~(1)~~, such as a metal cylinder or plate, a first tool ~~(3A)~~, which can be placed into contact with the workpiece ~~(1)~~ while being worked, means for rotating the workpiece ~~(1)~~ and the first tool ~~(3A)~~ about an axis of rotation ~~(2)~~ relative to each other, and means for moving the workpiece ~~(1)~~ and/or the first tool ~~(3A)~~ in a direction along said axis of

rotation (2), ~~characterised in that the forming machine~~
~~furthermore comprises~~ and at least a second tool (3B) disposed
behind said first tool (3A), which can be placed into contact
with the workpiece (1), and at least one of the first and second
tools is positioned eccentrically with respect to the said axis
of rotation (2).

18. (currently amended) ~~Forming~~ A forming machine suitable for
manufacturing products having various diameters, which forming
machine comprises at least a clamping device (10, 34) for
clamping down a workpiece (1), such as a metal cylinder or plate,
a first tool (3A), which can be placed into contact with the
workpiece (1) while being worked, means for rotating the
workpiece (1) and the first tool (3A) about an axis of rotation
(2) relative to each other, and means for moving the workpiece
(1) and/or the first tool (3A) in a direction along said axis of
rotation (2), ~~characterised in that the forming machine~~
~~furthermore comprises~~ and at least a second tool (3B) disposed
behind said first tool (3A), which can be placed into contact
with the workpiece (1), and in that the first and second tools
(3) are mounted in or on the forming machine in such manner as to
be capable of movement relative to each other during said
working.

19. (currently amended) ~~Forming~~ The forming machine according to
~~any one of the claims 16-18~~ claim 12, comprising at least a third
tool (3C) disposed behind said second tool (3B).

20. (currently amended) ~~Forming~~ The forming machine according to
~~any one of the claims 12 or 13~~ claim 12, wherein the tools (3)
each comprise two or more forming rollers, between which the
workpiece (1) can be retained.

21. (currently amended) ~~Forming~~ The forming machine according to
~~any one of the claims 12 -- 14~~ claim 12, wherein the tools (3)

can be moved relative to each other during the working.

22. (currently amended) ~~Forming~~ The forming machine according to ~~any one of the claims 12--17~~ claim 12, comprising a mandrel (5) or bush to be placed in or around, respectively, an unworked part of the workpiece ~~(1)~~, and by means of which a tensile force can be exerted on the workpiece.